Social and Environmental Assessment to Promote Sustainability
An Informal View from the World Bank

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Boxes

1 The IMF and Environment 5
2 Countervailing Trends in the Bank: Strengthening or Weakening SA/EA Policies? 6
3 The Cultural Dimension of Development for Social Sustainability 13
4 Topics Focused on in Environmental and Social Assessment 14
5 Topics Not Always Focused on by EA and SA in the World Bank 15
6 Violence Hampers Social Sustainability 15
7 Social and Environmental Competition with Economics 17
8 Comparison of Human, Social, Economic, and Environmental Sustainability 22
9 Attempts to Redress the Asymmetry Between Economic Capital and Social Capital 23
10 The Depletion of Natural Capital to Boost Social and Human Capital 24
11 The Evolution of Public Participation: Warning, through Consultation and Participation to Partnership: The Hydro Case 26
Introduction

This paper compares the history of Environmental Assessment (EA) with that of Social Assessment (SA) in the World Bank, in order to draw 'lessons learned' to improve development. The main need—to shift attention from the EA report to implementation on the ground—has been started recently (Goodland and Mercier 1999), so this paper focuses on process. The history of SA and EA shows how scarce social and natural capital is being converted to abundant economic capital. The

EA and SA processes are examined to see the extent to which they could promote sustainability, the maintenance of capital. This means SA and EA can be used to prevent inadvertent consumption of natural and social capital. The factual and historical start of the paper is followed by a brief but more theoretical section on the substitutability between the four main forms of capital and their relevance to achieving the goal of sustainability by means of improved SA and EA.

“I think the mistake the Bank has paid the highest price for was not recognizing the importance of environment.”

Lewis Preston
President, World Bank Group 1991-1995
Acknowledgments

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**Acronyms and Abbreviations**

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<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tr>
<td>EA</td>
<td>Environmental assessment</td>
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<td>EIA</td>
<td>Environmental impact assessment</td>
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<td>EPA</td>
<td>U.S. Environmental Protection Agency</td>
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<td>FAO</td>
<td>U.N. Food and Agriculture Organization</td>
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<td>ICOLD</td>
<td>International Commission on Large Dams</td>
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<td>IDA</td>
<td>International Development Association</td>
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<td>IMF</td>
<td>International Monetary Fund</td>
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<td>NEAP</td>
<td>National environmental action plan</td>
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<td>NGO</td>
<td>Nongovernmental organization</td>
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<td>NRDC</td>
<td>Natural Resources Development Council</td>
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<td>OD</td>
<td>Operational directive</td>
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<td>OEA</td>
<td>Office of Environmental Affairs</td>
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<td>OECD</td>
<td>Organization for Economic Cooperation and Development</td>
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<td>OMS</td>
<td>Operational manual statement</td>
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<td>Operational policy note</td>
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<td>SAP</td>
<td>Structural adjustment program</td>
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<td>SIA</td>
<td>Social impact assessment</td>
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<td>US-AID</td>
<td>U.S. Agency for International Development</td>
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<td>UNCED</td>
<td>United Nations Commission on Environment and Development</td>
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<td>UNEP</td>
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<td>UN</td>
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<td>WBG</td>
<td>World Bank Group</td>
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<td>WDR</td>
<td>World Development Report</td>
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**Recent Presidents of the World Bank**

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<td>Robert McNamara</td>
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<td>Alden Clausen</td>
<td>1981–86</td>
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<td>Barber Conable</td>
<td>1986–91</td>
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<td>Lewis Preston</td>
<td>1991–95</td>
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<td>James Wolfensohn</td>
<td>1995–present</td>
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The first observance of Earth Day on 22 April 1970 was noticed by World Bank President McNamara. In his UN address later that year, he announced he had appointed an environmental adviser, James A. Lee, who introduced "environment" to the World Bank during a long and distinguished career, and who retired in 1987. McNamara had been sensitized to environmental issues, partly by being publicly criticized inter alia by Princes Bernhard and Philip. McNamara had been influenced by drafts of the "Only One Earth" book by his friends Barbara Ward and Rene Dubois (1972), and had arranged for a thorough Bank review of the Club of Rome's 1972 "Limits to Growth" (Meadows and others 1972) book, so he was aware of the importance some people attached to the environment. Lee helped McNamara to exert environmental leadership at the UN's first Conference on the Human Environment, held in Stockholm in 1972, which led to the creation of UNEP.

Lee was a public health specialist. He created the Bank's three pronged definition of "environment" as: (a) public and occupational health, (b) the naturally occurring environment, and (c) the "social" dimension. So health and social considerations were firmly included in "environment" at the World Bank from the earliest days. Indeed, the Office of Environmental Affairs became the Office of Environmental and Health Affairs in the late 1970s. Lee managed to upgrade the Health Division into a freestanding Health Department in the mid-1980s, which emphasized provision of health care, while leaving human health impacts of projects to the environmental office.

Shortly upon taking office, Lee supported a review to specify what the social dimension of development is or should be (Cochrane 1973). Following Professor Glynn Cochrane's analysis, the Bank recruited sociologist Michael Cernea in 1974. Lee subsequently devolved all resettlement issues associated with World Bank projects to Cernea, which became the Bank's main social problem for the next couple of decades.

The 1970 U.S. National Environmental Protection Act mandated EA for all federally funded projects, and this was later extended—after a lawsuit brought by NRDC and others—to USAID-assisted projects in developing countries. The Bank issued voluntary environmental guidelines from 1975 on, but these were unable to prevent environmental damage sufficiently. Also from about 1975 onwards, the Office of Environmental Affairs financed consultants to do mini-EAs of around 10 days each, called "environmental reconnaissance" in those days, of major infrastructure projects contemplated by the Bank. But as OEA paid for these inputs, and as outsiders did them, influential project staff did not always internalize them, nor was environmental reconnaissance adopted as a standard tool. When I joined the Bank in 1978, the lack of clarity over the role of EA was such that I was asked to assess environmentally Brazil's Polonoreste program and the Paraguay/
Argentina Yacyreta hydroproject on my own in my first months en post during two 10-day missions. Nowadays, EA scoping alone for a single Bank-assisted project would take several weeks by an EA team.

The Clausen Presidency (1981–86) overlapped with "the decade lost to development." The two global oil shocks of 1974 and 1979 and imprudent petrodollar recycling had exacerbated indebtedness and double-digit inflation in OECD. President Clausen and Sr. Vice President Ernest Stern were not enthusiastic about the environment according to Wade (1997). Development became a race to prevent default of overindebted developing countries, and to protect private U.S. banks. Non-project loans, such as structural adjustment, grew from zero to over one third of total Bank lending during this period. "Environment" improved little during this lost decade.

In 1984, the Bank issued an overarching environmental policy: "Environmental Aspects of Bank Work" (OMS 2.36), its first mandatory environmental policy. The version finally adopted by the Bank was a series of worthy injunctions, although all had escape clauses. These injunctions worked to a limited extent; they fostered agreement on what was legitimately "environment," which included project-induced social impacts, such as health and resettlement. They prevented some damage caused by projects, but did not reduce damage to acceptable levels. This policy was the first attempt to inject the concept of environmental sustainability into Bank work. The policy stated that even the candidate list of projects from which the next project would be selected, must be sustainable. Sustainability was defined as maintenance of natural capital: on the output side as not exceeding the assimilative capacity of the environment to recycle wastes. On the input side, it was defined as not exceeding regeneration rates when harvesting renewables.

Serafian quasi-sustainability of non-renewable resources was added only later. The Bank was not ready for environmental sustainability at that time, so little happened until the Bank tried to operationalize sustainability following the Brundtland Commission's (1987) urgings to adopt sustainability as a major goal of development.

Apart from near total lack of environmental staff, the reason these injunctions failed adequately to prevent damage was that Bank staff could not at that time stomach specifics on how to carry out their work. "We are all grown-ups here, many of us have been colonial officers experienced in administering thousands of square miles of various colonies for many years, we do not need restrictive details on how to get the right thing done, we all know the common sense of what you have started to call environment"—was a widespread sentiment.

The environmental history of the World Bank will have to analyze the preponderance of ex-colonial staff from when the bank was created during decolonization, through their retirement which was essentially complete by the late 1980s. Against this should be balanced the rise in influence of the Young Professionals from the mid-1970s. By the mid-1980s, many vice presidents were fast tracked YPs. The first YP with any serious claim for experience with environmental issues was engaged in the mid-1990s. Colonial staff were seasoned administrators, assertive and supremely confident. In other settings this would be tantamount as paternalistic. YPs were dominated by doctrinaire Chicago school neoclassical economists. In those days such economists had no environment in their curricula. Macroeconomics has no environmental implications it was claimed; microeconomics has some mainly unimportant externalities, and one—pollution—had entered economic curricula by the late 1970s. Even YPs from developing countries had no experience in
their countries and even less with poverty alleviation or environment. Colonial goals of growth and export of raw materials prevailed, and were continued by neoclassical economists and YPs into "aid" or developmentalism. In fact some historians claim a continuity between imperialism, colonialism and paternalism as they evolved into "aid" and economic development. The trickle down theory began strongly from the early 1970s in an attempt to justify the emphasis on the export of raw materials, but it lingered on as structural adjustment through the late-1990s.

With regard to EA, the 1984 policy stated (a) that environmental impacts should be reviewed during project design, and (b) the results should be reported in post hoc Project Completion Reports. The first provision (a) led to the gradual appearance of single, bland boilerplate paragraphs in project design documents. These later became one page annexes for high impact projects. The second provision (b) led to post hoc copying of environmental criticism from the press into the Project Completion Reports. The criticism was taken from the press because no environmental staff had been invited to visit such projects. While such post hoc reports had no influence on the project itself, when too many completion reports highlighted irrefutable environmental criticism, Bank staff began to notice. Had we done more on the environment during project design, they wondered, would that have helped to prevent such criticism? Lack of specific EA policies meant that each project officer could do as much or as little on environment during design as they felt like.

From 1984 to 1986, criticism of projects causing much environmental damage increased, a long series of U.S. congressional hearings warned the Bank to improve its environmental capacity, member governments and NGO pressures became more difficult for the Bank to ignore, and the United States voted against a project for the first time on environmental grounds. Even so, the Bank did not budge (Wade, 1997). It took a concerted threat by member governments and NGOs to vote against replenishment of IDA grant funds, and a change in World Bank presidents for the Bank to strengthen its environmental capacity.

The Conable Presidency's (1986–91) reorganization of 1987 vastly increased environmental management capacity in the Bank for the first time. The Bank admitted that EA specifics are indeed needed for Bank staff and project designers, and that environmental precautions are not something everyone can be expected to design and implement effectively by common sense alone. One category of "environmental professionals" was added to the official list of Bank disciplines, rather than being lumped with "Technical Specialists—other." An Environmental Department was created centrally, containing three divisions, of which a professional environmentalist, Jane Pratt, led one. An environmental division was created in each geographical region of the Bank, although later two divisions were consolidated to serve two geographic regions each. Two of the four new regional environmental divisions were led respectively by a sociologist (Gloria Davis) and an environmentalist (Robert Goodland). Each regional environmental division decided on its own to include the social dimension as part of "environment." The Bank's social pioneer, Michael Cernea, remained in the Agriculture Department, but in 1990 moved to the Social Division of the Environment Department.

The environmental divisions staffed up with three main disciplines, which became known as "brown" and "green" environmentalists, and social scientists. Professional environmentalists grew one order of magnitude from the half a dozen when Conable arrived, to nearly ten times that by the early 1990s. These specialized respectively in pollution control, largely by chemical engineers, maintenance of natural capital, such as biodiversity by ecologists, and
social issues by sociologists and anthropologists. EA/SA was integrated from at least as early as the 1970 U.S. NEPA, and in the Bank from the mid-1970s until the late 1990s when divergence between EA and SA began. Environmental and social units began to separate in the regions and in the "center."

As soon as President Conable's 1987 reorganization was complete, India's Narmada dam controversy intensified, partly because adequate EA/SA had not been undertaken. The U.S. Treasury, President Conable and others then requested Bank staff to draft an EA Policy, borrowing the better parts of the U.S. NEPA. Amid much resistance inside the Bank, a watered-down, but mandatory version was adopted in 1989, 17 years after U.S. NEPA, but without stakeholder participation. Consultation and disclosure were not mandatory. The U.S. Congress then passed the Pelosi amendment in 1989, which encouraged the IDA and by extension the Bank to publicize the EA 120 days before Board presentation. External criticism flared and became so difficult to refute that a stronger EA Policy, broadly meeting prevailing international standards, was adopted in 1991, with full stakeholder participation. If the borrowing country refused to make the EA public, the Bank was obliged to withdraw. Timely and broad EA disclosure permitted affected people or their advocates to comment on drafts. This single provision vastly improved EA quality. EA reports became the main document available to civil society, hence, in a way, have become lightning rods for non-environmental criticism of development projects in general. Consultation and information disclosure became mandatory over a field broader than just EA by 1994.

The price paid to get the 1991 EA Policy draft accepted was to remove the requirement mandating EAs of non-project lending, such as structural and sectoral adjustment operations, which became 65 percent of total Bank lending by 1999. EA was kept out of macroeconomic, policy and sectoral analyses. This meant EA could be applied only to already identified investment projects. The Bank claimed that there would be little or no social or environmental impacts of SAPs. If there were impacts, they would be minor, and in any event they would be too complicated to tease out and assess. To do so would defeat the fast-design and fast-disbursing purpose of SAPs, the Bank felt. This was curious as most SAPs are similar; they impose fiscal austerity, cutting consumption, cutting budgets, increasing taxes, raising interest rates, devaluation, and accelerating the drawdown of natural capital. Removal of subsidies raised prices, especially those affecting the poor, causing bread-line riots, kerosene riots and so on for decades.

Ecuador's joint WB/IDB SAPs were assigned to the lowest EA Category, namely "C," because SAPs, at that time, were thought not to create any social or environmental impacts. These SAPs may have partly been behind the major civil unrest of 1994, prompting IDB's President Iglesias to inform the cabinet that he "wanted IDB to be part of the solution, not part of the problem" (Treagle 1998). More expensive cooking fuel accelerated deforestation for fuelwood. SAPs encourage exports, especially of natural resources, so deforestation intensified. Expenditures on social sectors such as health, nutrition and education decline, and unemployment rises. This was the first impact acknowledged by SAP designers. Following unemployment, malnutrition starts to rise, especially in vulnerable groups, such as the aged, children, the infirm and women. The jobless are forced into short term survival patterns such as cultivating steep slopes, cutting forest, and eating seed corn. Indonesia's 1998 trade liberalization caused more forest to be burned for oil palm plantations. This, and the extra dry 1997 and 1998 seasons, have been linked to the worst forest fires in history, irritating neighboring nations, increasing the
frequency of airplane and shipping crashes and releasing more greenhouse gas than all of Europe.

It took WWF's Sustainability Team, led by David Reed, and others a decade to get the Bank to acknowledge the "devastating effects of structural adjustment on the most vulnerable sectors of the population" (Reed 1992, 1996; Beneria and Feldman 1992; Treakle 1998; Ghani 1999). Food riots erupted in many adjusting countries, including Egypt. After such damage became clear, SAPs began to include specific social safety nets. This was a major improvement protecting vulnerable groups potentially affected by the SAL. After nearly a decade (c. 1991–1998) of intensifying environmental and social impacts and criticism, the Bank is now (1999) drafting requirements for the environmental assessment of SAPs, and is internalizing the concept of environmental sustainability, which had been dropped following the 1992 WDR.

IFC hired its first social scientist, Debra Sequiera, in 1996. The IMF seems to be behind the WBG in this regard (Box 1). They hired their first professional social analyst in 1999, so the Bretton Woods Institutions may both start EA SA of adjustment lending soon. SA especially seeks to ensure that the poor and the vulnerable are not harmed and preferably become beneficiaries of the SAP. Tranche releases and social impact monitoring became key tools in such adjustment operations.

Environmental compliance mechanisms were phased out at around this time. Regional staff became much more autonomous and no longer had any need to refer to the center. Meanwhile, the "center" or "anchor" was starved of budget, depended increasingly on the regions for money acting as internal consultants which reduced independence while fostering team work (for which read loyalty). Clearance and review functions fell into desuetude. This was partly because it was thought that the Bank's newly created (in 1993) Inspection Panel was more than enough. The IP was created as a result of pressure during IDA 10 negotiations of late 1992, and as an aftermath of India's Narmada commission (Morse and Berger 1992). The IP forced an element of accountability into the Bank, but after only five years, in 1999, the Board sought to reduce the powers of the IP. The balance of quality assurance, almost entirely with regional colleagues reviewing their own projects, looks as if it may start to shift again. This was the start of a resurgence in quality promotion by governments and by NGOs. For example, the U.S. Treasury, with all the technical resources of the U.S. Government behind it, increasingly queried the Bank's EA categorizations, while no Bank unit was capable of doing so.

Box 1
The IMF and Environment

The IMF is involved in the debate among neoclassical economists "What are the environmental considerations in macroeconomics." It is true that most macroeconomics texts exclude environment. In the minds of ecological economists, there is no debate at all on this point; "Green Accounting," for example, is all about environmental aspects of macroeconomics (El Serafy 1989, 1993, 1996; Daly 1996, 1999; Daly and Cobb 1994). Ecological economists insist on distinguishing between what is accounted as selling capital (depletion) and what is actually earning Hicksian income (sustainable by definition); IMF does not so distinguish. In the few years before he retired in 1998, IMF's Ved Gandhi had included environment in his work, as part of Vito Tanzi's Fiscal Department (Gandhi 1998). As of January 1999, IMF's Tax Department has three IMF officials who handle environment as part of their duties. The policy review unit also has some environmental responsibilities. Following the 1997-1998 Asian crisis, Sociologist Caroline Robb, author of "Can the Poor Influence Development? Participatory Poverty Assessments in the Developing World" and formerly of the World Bank, was hired full-time by IMF's Africa Department on 15 April 1999.

Environmental Management Series
The other IDA 10 landmark was a rule to disseminate more classes of information that hitherto had not been released. The 1993 Disclosure Policy (15.01) had improved transparency; the Bank could no longer claim confidentiality as a reason not to disseminate information publicly. Yet, from 1993 onwards, extant environmental and social policies were to be "converted" which meant "reformatted," "edited," and "clarified."

Environmental and social policy "conversion" was undertaken during this second decade largely of lost environmental leadership (Box 2). This has led to the social and environmental policies having less weight, according to the World Bank (1998), than other policies. For example, the IP found on the Yacyreta hydropower project that the civil and mechanical works were 99.8 percent complete, whereas the social and environmental components were only 30 percent complete. The Environment Department was largely excluded from President Wolfensohn's generous $250 million three-year "Strategic Compact" financing which started in March 1997, so their environmental staff declined, at least through 1999, whereas the social side received an extra $3 million and expanded. The Social Department waxed and the Environment Department waned. Although environmental compliance and staff were weakened during this decade, the Bank set up a new, powerful and well-endowed Quality Assurance Group in 1997, which seeks to foster compliance Bank-wide, including with environment. In addition, the Bank was setting up a "Safeguard Policy Compliance Unit" as of 1999.

The pivotal entry point for Bank-assisted support to each country, the Country Assistance Strategy, remained confidential even to unauthorized Bank staff. EA at the country level was resisted by the Bank until after the delegates for the IDA 9 replenishment had instructed the Bank to require IDA member governments to prepare NEAPs. This was formalized in 1992 (OD 4.02), and later extended for all borrowers. Sectoral EAs also are slowly increasing, although not yet required.
Box 2

Countervailing Trends in the Bank:
Strengthening or Weakening SA/EA Policies?

This sensitive but crucial point lacks consensus. The causes leading to environmental and social policy 'conversion' are unclear; there are countervailing tendencies in the World Bank. The 1991-93 Wapenhans 'Implementation,' 'Getting Results,' and 'Next Steps' Reports were commissioned by President Lewis Preston to rebalance Bank work away from fixation on project preparation and more towards improving implementation. Wapenhans had urged the Bank to distinguish, in its operational instructions, between mandatory policy requirements, for which it could be held accountable, and voluntary best practice. This recommendation led in 1993 to the new format of Operational Policies (OPs), Bank Procedures (BPs), and Good Practices (GPs). The Inspection Panel, created in September 1993, was perceived as fostering accountability to the legalistic letter of Bank policies. While this was not at all so, and was never its intent, all policy instructions were 'converted' to the new format to differentiate the mandatory from the voluntary.

WDR 1992, the UNCED Rio Conference, and all independent scorecards then and five years thereafter, agreed that environmental quality in developing countries is bad and worsening, with exceptions of course. The Bank had rejected the findings of the Morse Commission on India's Narmada, and the government cancelled the loan for the almost quarter-built project early in 1993. Thus there was a strong case at that time for strengthening, rather than for weakening, environmental policies. Environmental policies were strengthening up to 1992 (such as EA Policy); "conversion" of policies began in c.1993-94, and some conversions are still ongoing as of 1999.

Some Bank managers claimed social and environmental policies caused Bank lending costs to escalate thus driving business to sources of finance with less stringent policies (for instance, IFC reduced its commitment to Chile's Biobio dam which was taken up by the Dresdner Bank). These managers thus implied that the Bank should reduce its social and environmental safeguards as they were too costly. The confidential 1996-97 Cost Effectiveness Review of Peat Marwick Accountants looked at ways to bridle internal administrative costs (allegedly environmental and social costs accounted for up to 25 percent of total project preparation costs), which may have been greater than the social and environmental impact costs of projects in clients countries. Thus, Peat Marwick inferred that the administrative costs of the Bank's social and environmental requirements may have been excessive. Of course, they are far less than the costs of environmental impacts arising from ill-designed projects. Later the Peat Marwick report led to President Wolfensohn's Strategic Compact of 1997.

The Board is on record as asking why environmental and social policies appeared to them as being gutted. Some policy points were indeed usefully clarified, but some mandatory policies were dropped, others were 'Inspection Panel-Proofed,' others were weakened in minor ways, and much mandatory became voluntary. For example, two important energy policies (Power Sector Policy and Energy Efficiency Policy) were downgraded from mandatory to 'good practice.' Now, years later, they may be upgraded. The policy on the environmental and social impacts of dams and reservoirs was relegated to a Best Practice annex (B of 4.01) with no discussion. This did not help the big dams controversy, which is still raging. The policy on Involuntary Resettlement is mired in controversy as of late 1999, and it is too early to predict what version may finally be adopted. The umbrella environmental policy (Environmental Assessment) was weakened, although some of its clauses were later reinstated by the Board. The current pesticides policy (OP 4.09) is clearly weaker than the one it replaced, as are the 'Standard Bidding Documents' for biocide purchase, which omits IPM. The whole process became so vexed that what was claimed to be merely 'editing, clarification and reformatting' has taken more than six years, and is still not complete (for example, Involuntary Resettlement, and Indigenous Peoples).
A Potted History of SA in the World Bank

The history of the entrance of social concerns into the World Bank has yet to be written. Thayer Scudder was the first consultant social scientist who worked at the Bank. President McNamara had started to emphasize rural development for the first time in the World Bank in the late 1960s. Tapped by John C. de Wilde, then Director of the Bank’s Economic Staff, Scudder joined a team in 1964 which produced the two-volume “Experiences with Agricultural Development in Tropical Africa” in 1967 (de Wilde and others 1967). Scudder continued as a leader on integrating the sociological dimension into economic development, especially involuntary resettlement and riverbasin management (for example, Scudder 1994; 1997a,b; 1999). Anthropologist Neville Dyson-Hudson also consulted for the Bank on livestock projects in the 1960s.

In the early 1970s, Glynn Cochrane “...worked at—though not for—the World Bank” (Francis and Jacobs 1999; see Cochrane 1973). On his own initiative, Cochrane spent several months in the institution reviewing the portfolio, and identifying the potential roles for social scientist. Following Cochrane’s 1973 report, the Bank’s first sociologist was hired in 1974, Michael Cernea, who after a long and distinguished career, retired in 1996. By far the main social impact caused by Bank projects was that on people displaced by infrastructure projects, such as big irrigation and hydro dams, frontier land settlement, and transmigration of whole communities, which had become common during McNamara’s emphasis on rural development.

Cernea drafted and persuaded the Bank to adopt its first policy on a social impact of development, namely “Involuntary Resettlement” in 1980. This is still the biggest social issue in the WBG, and attracts the most controversy of all impacts of development projects. Following two decades of striving, involuntary resettlement shows signs of improving. Planning has improved and the number of resettlement plans is increasing. *Post hoc* reviews of resettlement (for example, World Bank 1994, 1998) show that while it is difficult to identify projects where involuntary rural resettlement has improved oustees incomes promptly after their move, the number of successes is increasing. However, project budgets for involuntary resettlement remain chronically underfunded; financing is denied, and implementation is distorted (Cernea 1999 pers.comm.)

Part of the controversy is that Bank policy perhaps aims too low. “Displaced persons should be assisted in their efforts to improve their livelihoods and standards of living or at least to restore them, in real terms, to pre-displacement levels or to levels prevailing prior to beginning of project implementation, whichever is higher” Draft OP 4.12, April 1999 I(c) (emphasis added). Cernea (1999) is clearer on the target: “The primary goal of any involuntary resettlement process is to prevent impoverishment and to improve the livelihoods of resettlers.” Making oustees ‘no
worse off' at some, often long, time after their move is impoverishment. Income restoration immediately after relocation has rarely been achieved and is stagnation at best. It cannot be construed as development. Restoration of livelihoods to pre-displacement levels after several years ago seems retrogressive. Indeed, Scudder argues that policies emphasizing mere restoration can be expected to leave a majority of project affected people worse off.\(^3\) In my opinion, oustees must be made immediately and clearly better off after their move, at least in the crass materialistic sense of better land, improved housing, homegardens, paths, rural electrification, schooling, piped water and sanitation, clinics, training, jobs and so forth. Potential losers need to be compensated so that they are better off.

The two elements of SA are clear; first do no harm ('prevent impoverishment'), second improve livelihoods or alleviate poverty. Maintaining social capital (defined in Box 8), or at least not depleting it, needs more attention than hitherto. The policy of the international big dams lobby (ICOLD 1997) is developmental rather than stagnational: oustees shall be better off promptly after their move. The World Bank’s view, as of this writing, is that if one cannot even restore livelihoods, why aim higher and try to make oustees better off? This is controversial. Most of the Bank’s ‘problem projects’ are so-called precisely because they have massive and unsuccessful resettlement. India’s coal projects and many irrigation and hydroelectricity dams just have been unable to make oustees ‘as well off’ after their move. The Bank is now subject to the criticism that poverty trickles down from ill-designed projects: reparations are being bruited against inadequate project designers. Designers responsible for flawed projects may be held accountable when they fail—is the proposal.

The next social policy adopted by the Bank in 1982—on vulnerable ethnic minorities—originated from the environmental office.\(^4\) This policy was initiated because the Bank wanted to finance a highway ("Brazil: Seventh Highway Project: BR 364") straight through the Amazon jungle in Brazil and had scarcely heard of vulnerable ethnic minorities, much less how they are more likely to be harmed than helped by conventional development projects. This series of projects dating from 1981, later known as the Northwest region or Polonoroeste program and Planafloro, is still fraught with controversy, and a complaint was filed with the Inspection Panel in 1995. The ethnic minority policy was adopted too late to be mandatory in Polonoroeste, but was followed to such great effect in the next relevant project, Carajas Iron Ore and Rail, that by 1983 the Bank was financing creation and protection of more than half of all Brazil’s Amerindian reservations!

Since that pioneering start in the early 1980s, the vulnerable ethnic minority policy has been increasingly followed in Bank projects, and similar policies have been adopted by other development agencies. Now entire loans are specifically targeted to support—and primarily developed by indigenous peoples themselves—such as the 1998 loan to support the indigenous peoples of Ecuador.

The two major social policies, Involuntary Resettlement (1980), and Vulnerable Ethnic Minorities (1982) mandated mitigation of these two severe social impacts stemming from many development projects. From the early 1980s until the 1990s, Bank social scientists tried to foster compliance with these two social policies, and promoted social inputs into sectoral policies such as those of slum improvement and urban renewal, irrigation, and forestry. New disclosure polices stopped prohibiting discussions with NGOs, and soon thereafter actually started to foster cooperation with civil society (Cemea 1988; policy 1989). Bank policy documents themselves ceased to be confidential and were shared with the borrowers who had to comply with them. A huge success was achieved in the
early 1990s when the Bank decided that all resident missions would have their own, usually local, Bank-NGO officers. Grass roots NGOs often know far more about projects than Bank staff, and more than project proponents frequently know. That single device, involving the local NGO officer, greatly improved project quality.

Policies seeking to redress gender imbalance (Goodland 1995), and promoting ‘participation’ (1994) were adopted. But “the general requirement for social appraisal in project design took a back seat” (Francis and Jacobs 1999). “Compliance with the policy on sociological appraisal of projects was far from general and the institutional mechanisms for absorbing them in practice were insufficient.” “Social appraisal requirements disappeared in 1994 without explanation” as part of the general ‘conversion’ of the portfolio of social and environmental policies. Brief guidelines for “Social Assessment” were published in 1995 as a voluntary Dissemination Note. Detailed guidelines for social assessment are under preparation as a CD-ROM.

In view of this impasse, Cernea proposed and Wolfensohn agreed to the formation of a Social Development Task Force in 1996. This aimed at integrating social analysis into operational work, and led to major improvements, which are not detailed here. The main result was to elevate the social division from inside the Environment Department to a full and freestanding Social Development Family and Department led by its own Director, Gloria Davis, in the Bank 1978–2000, armed with a generous budget, and new staff positions. Production of excellent SA publications boomed. While institutionalizing social assessment became a key goal of the new department, neither a policy on SA or on SIA had been adopted by the Bank as of 1999. “Some SA practitioners are content for components of social policy to continue to live as squatters within the house of EA.” “In the absence of a carrot (incremental funding) or a stick (a social policy), cost-cutting and time-saving demands will force Bank and Borrower teams to cease to do SA altogether and will revert back to the fragmented approach to only those social mitigation issues on which there is clear policy (Jacobs 1998).

‘Social assessment’ has been more recently defined ambitiously by Cernea and Kudat (1997) as deciphering an unfamiliar social map of a country, in order to understand “the structure of these societies, their cultures, the wishes of their populations.” This could be considered a subset of ‘national social analysis’, akin to the series of IDA-mandated National Environmental Action Plans (NEAPs; vide infra) and similar national diagnoses, which, despite the name, first identify national environmental priorities, and second, seek to address them. Bank critics, led by the U.S. government, sought to strengthen SA and EA by mandating its use in an overall country-level context. This IDA condition led to a new policy on NEAPs. They were to have been grass roots up processes to foster national consensus on environmental priorities. This was to have been fed into the Bank’s lending program for that country.

SA looks beyond project-induced impacts, and towards development effectiveness of projects. SA seeks to ensure that positive social development outputs are achieved. Although the general boundaries of what qualifies as SA are generally agreed upon, agreement on specifics is still lacking among practitioners (Jacobs 1998). EA remains more impact-oriented than SA, but is moving toward achieving a net improvement of the environment with the project, beyond mere mitigation of known impacts.

The Bank’s 1984 guidelines required what is referred to as ‘social appraisal.’ This is defined as “...the sociocultural and demographic
characteristics of populations likely to be adversely affected by a proposed project, the social organization of productive activities in the project area, the cultural acceptability of project design, its compatibility with intended beneficiaries, and the social strategy for project implementation..." Therefore, the terms ‘social assessment,’ ‘social analysis,’ and ‘social appraisal’ overlap and are partly focused on identification of national, social characteristics, or those of the affected people, and national social priorities, and by implication their fulfillment. These three terms also contain the sense of identification of the potentially adverse social impacts of project design, but are not confined only to impact mitigation. SA tends to be more at the individual project level; social analysis is more macro or even national in scope.

Second, ‘Social Impact Assessment’ (SIA) is a narrower concept, and is falling into desuetude. SIA used to be the identification, prevention, minimization, and mitigation of potentially adverse impacts of a proposed project on human society, carried out as part of project design, as is EIA. Now, SA is becoming extended as a tool to monitor social development impacts of projects during implementation. SA as a monitoring tool allows adaptation or restructuring to ensure that intended social development impacts are indeed achieved. This contrasts with EA which rarely, if ever, leads to project restructuring or even adaptation of the project after construction. Clearly, effective SA can be achieved only after knowing as much as possible about the sociocultural characteristics of the country, or at least of the project area.

The reason for overlap of these terms is that social dimensions are often specific to the society surrounding a project. Environmental impacts are biophysical and are often less site specific. \( \text{SO}_x \) air pollution, for example, arises from specific sources (for example, a high-sulfur coal-thermal electricity generating plant) and is more independent of the environment into which the sulfur gases are released. Humans have similar tolerances for inhaling sulfur dioxide, irrespective of their social characteristics. Social analysis does not focus only on the prediction of adverse impacts and their mitigation to the extent EA still does. That is why SIA has become rare in the terminology of social analysis. Social analysis takes the broader approach of understanding the social fabric, diagnosing the social map, and assessing the willingness of stakeholders to participate in the proposed project. Sectoral social assessments are clearer; they address the whole sector, ranking all potential projects according to their social acceptabilities, well before a single project is identified. Only the best project from the sectoral ranking is then later taken up and designed. After social contexts, social properties, social constraints and risks, Cernea and Kudat (1997) include in the definition of Sectoral Social Assessment, “the social impacts of sectoral changes” when they helped to design an analysis of the entire coal sector in Russia.

The main topics comprising the sociological dimension of economic development, as shown by the recent textbooks on the subject, include poverty alleviation, social welfare, social justice, equity, vulnerable groups, gender balance (1994 policy), human and social sustainability (Box 8), culture (Box 3), education, resettlement, unemployment, land tenure, common property and open access resources, abolition of slavery, debt peonage, ILO conventions, slum upgrading (Box 4). That is an important and broad agenda.

Box 4 lists the main topics of concern to social and environmental analysis of development in general. On the social side, as of about six years ago, SA embraced three categories; first, impacts (for example, on unacculturated jungle dwellers or aboriginals); second, goals (for example, poverty alleviation); and third, processes (for
Box 3
The Cultural Dimension of Development for Social Sustainability

Culture is becoming recognized as relevant for sustainable development, and is an element in social and human capital (Sen 1999, Warren and others 1995), although still disputed by many. Culture can be learned, such as the value of more education which modifies behavior. The common human attributes of emulation, imitation and admiration lead to culture change. By using their power of ‘choice’ and ‘voice,’ people can help control their own environments and the development affecting them. In addition, culture fosters the demand for cultural property services (Goodland and Webb 1987; OMS Cultural Property), which is a big attraction in the world’s biggest industry, namely tourism, although much of tourism is not based on culture. Culture has to be maintained, nurtured and protected—or it disappears. This applies to all culture, not only to archeological, historic and spiritually important sites. For example, local music is easily outcompeted by Hollywood muzak; local cuisine is outcompeted by western junk-food; local languages are outcompeted by American, local dress is outcompeted by jeans and BB caps. In many countries, the most widely viewed movies are all from Hollywood; India is one of the few exceptions. Cultural adaptation to changing circumstances is essential. But without vigilance, culture is lost and this impoverishes. The cargo cults and consumer oligoculture are examples. Imperial-style takeover of indigenous culture by a dominant one devastates local economies, promotes ethnic tensions and can lead to xenophobia. Local cultures contain many coping mechanisms which are destroyed when traditional culture is out-competed.

example, participation, stakeholder analysis). On the environmental side, the topics are mainly ‘impacts’ that need to be identified, prevented or mitigated; of course, EA was originally termed ‘environmental impact assessment’. EA has some process components, such as participation and implementation of the mitigation, and these need to be emphasized much more in the future.

As EA started in industrial countries, pollution became almost synonymous with environment. The typically Western concept of environment as pollution and little else unfortunately persists today. WDR 1992 tended to reinforce that view, and in mid-1999 the sole keynote speech at the Bank’s enviros retreat urged us to give up on forests, biodiversity and extinctions, and focus instead on sanitation and air pollution. Seeking a balance between these two points of view was absent. This would be a cruel hoax for developing countries. It is misleading for development because natural resources (forests, fish, minerals) are the source of most developing country wealth. Whereas pollution is reversible, loss of much natural capital is not.

While many capital cities in the developing world are polluted (for example, Mexico City, Bangkok), most of the other cities are not.

However, the Bank focuses most social attention on a small subset of these. Most Bank social scientists focus on the three big issues: First, involuntary resettlement (1980 policy); second, vulnerable ethnic minorities (1982 policy); and third, more recently, social inclusion in the broad sense. Projects making oustees and ethnic minorities worse off are pathologies of development. Although development seeks above all to benefit people, oustees and ethnic minorities are rarely better off after a project and were usually worse off, until recently. Social inclusion and participation are fostered by analysis of institutional capacity, of beneficiaries, and of other stakeholders (1994 ‘World Bank and Participation,’ 1996 Participation Sourcebook). Participation was made mandatory by the EA policy, which required that civil society be consulted in a meaningful fashion at least twice during project design. These two consultations are at the EA scoping stage, and when the EA draft is
Social and Environmental Assessment to Promote Sustainability — An Informal View from the World Bank

Participation was amplified by the 1991 official EA Sourcebook, but is now led by the social side.

Poverty alleviation, provision of health services, employment, and education are focussed on in the Bank mainly by non-sociologists (Box 5). That is the grand irony of SA and EA; they almost exclude some of the most important elements. The two topics central to environmental sustainability are population and energy; both are dealt with in the Bank by distant staff. As of mid-1999, the major departments of agriculture, energy, transport and population sectors did not have a single environmentalist. Similarly for SA; the ‘social’ sectors (education, health, nutrition, and poverty alleviation) are largely dealt with by staff other than social scientists and SA colleagues, formerly without adequate participation. The exception is Caroline Robb’s (1999) finding that the poor can and should influence poverty alleviation programs. The result of the divergence between social and

### Box 4

#### Topics Focused on in Environmental and Social Assessment

<table>
<thead>
<tr>
<th>Environmental Assessment</th>
<th>Social Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biophysical Impacts:</td>
<td>Human &amp; Social Impacts:</td>
</tr>
<tr>
<td>Maintenance of Natural Capital</td>
<td>Maintenance of Human and Social Capital</td>
</tr>
<tr>
<td>Pollution of air</td>
<td>Involuntary Resettlement</td>
</tr>
<tr>
<td>Pollution of water</td>
<td>Vulnerable Ethnic Minorities;</td>
</tr>
<tr>
<td></td>
<td>Indigenous Populations</td>
</tr>
<tr>
<td>Pollution of soil</td>
<td>Vulnerable social groups in general</td>
</tr>
<tr>
<td>Noise Pollution</td>
<td>Participation;</td>
</tr>
<tr>
<td>Extinction of species; Biodiversity</td>
<td>Community Cohesion; Stakeholder analysis,</td>
</tr>
<tr>
<td></td>
<td>Equity</td>
</tr>
<tr>
<td>Human Health/Communicable and Degenerative Diseases/Epidemiology</td>
<td>Violence: Post-conflict reconstruction and war torn societies (Box 6)</td>
</tr>
<tr>
<td></td>
<td>Culture, Cultural Property, Cultural Heritage</td>
</tr>
<tr>
<td>Greenhouse Gas; Climate Change</td>
<td>Slavery; Debt Peonage;</td>
</tr>
<tr>
<td></td>
<td>Child Labor, Prison Labor</td>
</tr>
<tr>
<td>Deforestation</td>
<td>Poverty Alleviation</td>
</tr>
<tr>
<td>Habitat Loss</td>
<td>Gender Impacts</td>
</tr>
<tr>
<td>(for example, old growth forest, especially tropical, mangroves &amp; coral reefs)</td>
<td>Land Tenure;</td>
</tr>
<tr>
<td></td>
<td>Open access resources; Common Property</td>
</tr>
<tr>
<td>Desertification</td>
<td></td>
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</tbody>
</table>

Environment Department Papers
A Potted History of SA in the World Bank

Box 5
Topics Not Always Focused on by EA and SA in the World Bank

<table>
<thead>
<tr>
<th>Environmental Assessment</th>
<th>Social Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>Population</td>
</tr>
<tr>
<td>Energy</td>
<td>Human Capital, Education</td>
</tr>
<tr>
<td>Transport(^9)</td>
<td>Employment, Poverty Alleviation</td>
</tr>
<tr>
<td>Agriculture, Nutrition</td>
<td>Health, Nutrition</td>
</tr>
</tbody>
</table>

Box 6
Violence Hampers Social Sustainability

Violence is the newest topic in Bank social concerns, having set up a Post-Conflict Unit in 1997, after the International Torture Convention was adopted. Violence is an exceptionally important constraint on social sustainability, and has strong and direct links with environmental sustainability. Of course, the environmental impact of war is the most critical. Violence undermines environmental progress as well as reverses human and social sustainability. Education promotes tolerance, reduces violence, and avoids the waste of repeating mistakes of others. 'Voice and choice'—democracy and freedom—are effective in preventing famines and other social disasters. To the extent peace and trust are the opposites of violence, trust reduces transaction costs and promotes cooperation, so can be economically beneficial. Neighboring farmers may share a combine harvester, for example.

Environmental staff from the mid-1990s is joined the poverty staff. But that is not at all common.
3 Linkages Between SA and EA

There is usually a clear division of labor between SA and EA. Some issues overlap, such as human disease exacerbated by a project. But even then SA deals with the social aspects of the disease, while EA looks at the biophysical aspects, such as vector breeding habitat. SA of roads addresses the social aspects of AIDS.

Box 7
Social and Environmental Competition with Economics

<table>
<thead>
<tr>
<th>Environmental and Social</th>
<th>Economic</th>
</tr>
</thead>
<tbody>
<tr>
<td>More qualitative</td>
<td>Quantitative</td>
</tr>
<tr>
<td>Optional</td>
<td>Mandatory</td>
</tr>
<tr>
<td>Matters of degree</td>
<td>Precise</td>
</tr>
<tr>
<td>Slow evolution</td>
<td>Proximal project goals</td>
</tr>
<tr>
<td>Much attention to design</td>
<td>Monitoring built into whole process</td>
</tr>
<tr>
<td>Some attention to construction</td>
<td>Many, powerful, and well-trained economists</td>
</tr>
<tr>
<td>Little or no attention to operation or decommissioning</td>
<td>Traditional, establishment, respectable</td>
</tr>
</tbody>
</table>

Some topics need to be coordinated, such as the fish protein resources of affected communities. Ecodevelopment and natural resource management projects tend to require integrated SA/EA. Reservoirs need both EA and SA, and it is preferable to integrate them. The poor in cities also suffer disproportionately from environmental damage such as unsafe water and sanitation, food spoiled from lack of refrigeration, toxic gas from inappropriate fuels and inadequate ventilation, city air pollution from industry and vehicles. In addition, as the impacts of climate change are intensifying, the poor suffer most from weather extremes and disease.

Now that SA and EA have recently become separate stand-alone tools, we should foster joint or parallel work. Both have common stakeholders, and institutional needs assessment is almost fully overlapped. Participation involves almost exactly the same stakeholders in EA and SA. The benefits of retaining SA/EA links and cooperation are clear. The linkages between newly separated EA and SA is a topic meriting more attention.

A great EA team will substantially improve an identified project so that impacts are designed out, mitigated or offset so that the overall project becomes an unambiguous plus. However, a barely average EA team may cosmeticize the project so it just clears the appraisal hurdle. Contrast the Chad Cameroon oil pipeline project which finances two new National Parks as offsets (totalling almost one million hectares and starting with $3 million), with the China Western Region project, which has major impacts, but was reconfirmed as an EA Category 'B' following the international criticism in 1999, and has few net positive environmental offsets.
The Evolution from “Impact” Assessment to Assessment

There are two distinct social and environmental needs. First, what are the main social and environmental dimensions of economic development, especially as applied to an unfamiliar country? Second, what are the potentially negative social and environmental impacts of a specific proposed project? These two questions are here addressed in turn. The social and environmental dimensions of development have long pedigrees; they are contrasted in Box 4.

From before 1970 to c.1992, EA was shorthand for EIA plus SIA. In the last few years, SA is coming into its own in the World Bank. This is warmly welcomed by EA colleagues. SA now is adopting its own procedures, guidelines, manuals, training, staff and administrative units, and so forth, as of 1998–99. However, the fundamental links between the two bear attention. Big parts of the two sides are clear: SIA addresses resettlement (impacts on oustees and host populations), ethnic minorities, cultural heritage and participation; EIA addresses pollution and depletion of natural capital, or the source and sink constraints to sustainability.

EIA and SIA focused on potentially adverse impacts of development on communities and on the environment. This was a very useful step in improving the effectiveness of development. But it is inherently weak in two ways. First, it aims low, namely to avoid doing harm. While this is essential, and still not always fully achieved, it is clearly insufficient. The second inherent weakness of impact assessment is that it is applied to an already identified project. SIA/EIA cannot influence what projects are taken up; they can only seek to improve whatever project was previously selected. SIA/EIA rarely modify the design of projects more than marginally. The scope for improvement is not so much in improving project design; it is the selection of projects themselves, such as in sectoral SA and EA (Goodland and Tillman 1996).

SIA/EIA phased out of emphasis on identification of adverse impacts at about the same time—in the early 1980s. They became SA and EA because they wanted to move beyond the mere ‘do no harm’ mode, and into a more proactive and broader mode of improving society and the environment more generally so that there would be a net improvement. EA is still narrower than SA. All projects involve people; some projects do not influence the environment except in trivial ways. Privatization of the national telephone system, for example, normally has trivial environmental impacts but could cause major social ones. EIA/SIA can be successful in predicting adverse impacts of a specific project and designing out the impact, or mitigating it. But that is not enough. There will always be many small, undetected impacts. Now bold environmental offsets are becoming the norm. Similarly with institutional capacity strengthening: All SA/EA professionals know it is more important than identification of impacts, but we are vague on how much is enough.
5 Capital, Sustainability, and Assessment

What can we learn from the history of SA and EA (above) with regard to promoting sustainability and preventing the inadvertent harm to social and environmental capital? Despite their chequered history environmental and social assessments (EA and SA) are among the main means of avoiding inadvertent consumption of capital, and for promoting sustainability in economic development at present. Capital consumption means we become worse off. Decapitalization is rife and intensifying. SA and EA are the World Bank’s main instruments for incorporating social and environmental analysis into the design and implementation of economic development projects in developing countries. SA/EA are tools for understanding how peoples, society and the environment interact and are affected by development interventions. Specifically, SA/EA identify potential decapitalization in time for it to be avoided.

Sustainability means maintaining capital constant or undiminished; disinvestment undermines sustainability. Decapitalization is a clear sign of lack of sustainability. But there are four forms of capital: human, social, economic and environmental (Box 8), with limited substitutability. We have to learn to gauge which of the four forms of capital is limiting and invest in that. Economic or manufactured capital was by far the scarcest capital for all of human history until less than half a century ago. It made sense to invest in the factor in the shortest supply. Depletion of Europe’s forest and coal to fuel the Industrial Revolution made sense because natural capital was abundant and manufactured capital was scarce. There were no source constraints and few sink constraints.

When natural capital was abundant and other forms of capital were scarce, it was logical to deplete natural capital to build up the type of capital in shortest supply. Timber was limited by shortage of saws and sawmills; fish catches were limited by shortages of boats and nets. Now that halcyon era has ended. The limiting factor is no longer manufactured capital; natural capital has become scarce. Extinctions and depletions now limit fish, not lack of boats and nets. As most natural capital cannot be substituted for, this paper does not explore the financing of human and social sustainability by depleting natural capital.

But the switch from abundant natural capital to scarce natural capital was so sudden and so recent that not all of society has realized it yet. We now see that much more investment is needed in human, social and natural capital; much less in economic capital. As part of their goals of improving development and reducing impacts, SA and EA seek to shift current emphasis on economic capital, and to invest more in the neglected forms of capital, specifically human, social and natural capital (Box 8).

As a practical matter, the means to prevent human and social capital from declining will differ from the means to prevent natural capital (=environment) from declining (Fig. 8).
Human sustainability means maintaining human capital. Human capital is a private good of individuals, rather than between individuals or societies. The health, education, skills, knowledge, leadership and access to services constitute human capital. Investments in education, health, and nutrition of individuals have become accepted as part of economic development.

As human lifespan is relatively short and finite (unlike institutions) human sustainability needs continual maintenance by investments throughout one's lifetime.

Promoting maternal health and nutrition, safe birthing and infant and early childhood care fosters the start of human sustainability. Human sustainability needs 2-3 decades of investment in education and apprenticeship to realize some of the potential that each individual contains. Adult education and skills acquisition, preventive and curative health care may equal or exceed formal education costs.

Human capital is not being maintained. Overpopulation is intensifying and is the main dissipative structure worsening per capita indices. That is far graver than overcapitalizing education so that laborers have PhDs.

Social sustainability means maintaining social capital. Social Capital is investments and services that create the basic framework for society. It lowers the cost of working together and facilitates cooperation: trust lowers transaction costs. Only systematic community participation and strong civil society, including government can achieve this. Cohesion of community for mutual benefit, connectedness between groups of people, reciprocity, tolerance, compassion, patience, forbearance, fellowship, love, commonly accepted standards of honesty, discipline and ethics. Commonly shared rules, laws, and information (libraries, film, and diskettes) promote social sustainability.

Shared values constitute the part of social capital least subject to rigorous measurement, but essential for social sustainability. Social Capital is undercapitalized, hence the high levels of violence and mistrust.

Social (sometimes called "moral") capital requires maintenance and replenishment by shared values and equal rights, and by community, religious and cultural interactions. Without such care it depreciates as surely as does physical capital.

The creation and maintenance of social capital, as needed for social sustainability, is not yet adequately recognized. Western-style capitalism can weaken Social Capital to the extent it promotes competition and individualism over cooperation and community.

Violence is a massive social cost incurred in some societies because of inadequate investment in social capital. Violence and social breakdown can be the most severe constraint to sustainability.

The claim questioning social capital because it tends to perpetuate traditional and tribal ways of life, thus constraining modernization, is rejected.

Capital, better economic capital, should be maintained. The widely accepted definition of economic sustainability is "maintenance of capital," or keeping capital intact. Thus Hicks's definition of income—"the amount one can consume during a period and still be as well off at the end of the period"—can define economic sustainability, as it devolves on consuming value-added (interest), rather than capital.

Economic and manufactured capital is substitutable. There is much overcapitalization of manufactured capital, such as too many fishing boats and sawmills chasing declining fish stocks and forests.

Historically, economics has rarely been concerned with natural capital (for example, intact forests, healthy air). To the traditional economic criteria of allocation and efficiency must now be added a third, that of scale (Daly 1992). The scale criterion would constrain throughput growth—the flow of material and energy (natural capital) from environmental sources to sinks.

Economics values things in money terms, and is having major problems valuing natural capital, intangible, intergenerational, and especially common access resources, such as air. Because people and irreversibles are at stake, economic policy needs to use anticipation and the precautionary principle routinely, and should err on the side of caution in the face of uncertainty and risk.

Although ES is needed by humans and originated because of social concerns, ES itself seeks to improve human welfare by protecting natural capital (NC). As contrasted with economic capital, NC consists of water, land, air, minerals and ecosystem services, hence much is converted to manufactured or economic capital. Environment includes the sources of raw materials used for human needs, and ensuring that sink capacities recycling human wastes are not exceeded, in order to prevent harm to humans.

Humanity must learn to live within the limitations of the biophysical environment. ES means natural capital must be maintained, both as a provider of inputs (sources), and as a sink for wastes. This means holding the scale of the human economic subsystem (= population x consumption, at any given level of technology) to within the biophysical limits of the overall ecosystem on which it depends. ES needs sustainable consumption by a stable population.

On the sink side, this translates into holding waste emissions within the assimilative capacity of the environment without impairing it.

On the source side, harvest rates of renewables must be kept within regenerative rates.

Technology can promote or demote ES. Non-renewables cannot be made sustainable, but quasi-ES can be approached for non-renewables by holding their depletion rates equal to the rate at which renewable substitutes are created. There are no substitutes for most environmental services, and there is much irreversibility if they are damaged.
Attempts to Redress the Asymmetry Between Economic Capital and Social Capital

Attempts to shift investment away from overinvested economic capital, and towards underinvested natural and human/social capital is exceedingly slow and has many opponents. It is related to the shift away from maximizing throughput growth and reliance on the Trickle-Down theory, and towards direct poverty alleviation. The trends show that economics needs ‘other means’ to alleviate poverty. Four examples:

(a) The United Nations “20/20 Initiative” is one example of a valiant attempt to redress this investment asymmetry. Under “20/20” Governments should aim at boosting their investment to 20 percent of their national budget allocated to basic social services (human capital), while official development assistance agencies should devote 20 percent of their investments to the same social programs. Currently, investment in social and human capital in many countries does not exceed 5 percent.

(b) At the 1995 UN World Summit for Social Development, 117 heads of state agreed to “The Copenhagen Declaration”, which prioritized social and human sustainability over GNP growth and other economic goals. It prioritized poverty eradication, full employment, social integration, equity, and education. It also mandated that SA be done on Structural Adjustment programs. Essentially, this declaration suggested that sole focus on trickle down should be balanced by much more direct investment in human and social capital.

(c) Theologian John Cobb (1999) makes the point that the world has evolved from being run on religionism (for example, Crusades), through the long rise in nationalism (ending in Naziism in 1945), and economism (such as by the Bretton Woods organizations from 1945 to the present). He now sees the start of displacement of today’s economism by earthism, or the increase in more social and environmental ways of running the world. This paper seeks to foster the trend to earthism or the internalization of currently externalized social and environmental costs, such as immiseration, extinctions and climate change.

(d) With the arrival of president Wolfensohn in 1995, the World Bank reduced its goals in number and elevated direct poverty alleviation as the single most important and overarching goal. Poverty alleviation became fighting poverty in 1998-99. References to maximizing GDP growth are declining. Investments in infrastructure (highways, power plants) declined, while structural adjustment with social safety nets rose to 65 percent of Bank lending in 1999.

Rigorous biophysical laws, not subject to negotiation (Box 8) govern natural capital. Social impacts are more matters of degree, often relative, (such as, the extent of poverty alleviation; the success of involuntary resettlement), and subject to change just as ethics change (for instance, abolition of slavery, redressing gender imbalance, equity for ethnic minorities).

The methods of the social sciences are so different from the rigorous biophysical laws of the environment, that connecting them creates challenges. Hermeneutics, the interpretation of human behavior and societies (what people think they are doing, and what other people think they think they are doing: Mazlish 1999) is alien to most environmentalists. For example, the impact of sulfur dioxide on human lungs is alien to many sociologists. CFC depletion of the ozone shield and its impacts on the earth occur irrespective of what we know about such impacts, or how important society feels they may be. Biophysical impacts are irrespective of what sociologists know or believe about such impacts.
Box 10
The Depletion of Natural Capital to Boost Social and Human Capital

Despite its scarcity and despite irreversibility, Natural Capital is still depleted in excess of regeneration rates in order to promote human and social sustainability. This harms environmental sustainability. Four examples:

(a) Recently, the president of the American Tuna Fishermen’s Cooperative said, yes, let’s take the last year or so of the Bluefin Tuna as the price is right (one 715-pound Bluefin fetched $180,000 in Tokyo’s Tsukiji fish market, for 2,400 servings of sushi at $75 each) and this will provide an extra year or so of employment for the Tuna industry. Full-grown Bluefins (1,200 pounds) have long since disappeared; now most tuna are caught before they reach breeding maturity, which spells doom for any fishery. It is folly to save jobs by risking an entire resource, like killing the goose that lays golden eggs.

(b) The thousand-year-old, most profitable fishery in the world, Cod on the Grand Banks, provided over two decades of warning, before totally collapsing in 1992. This destroyed the jobs in 1,000 fish processing plants formerly supplied by 29,000 registered fishing vessels and 62,000 employees. This was foreseen and unnecessary. With more prudent management, Norway’s Barents Sea cod fishery has rebounded to a quota of 850,000 tons annually.

(c) Most of the national territory of Nauru has been exported as phosphate and the proceeds invested in international stock markets which earn $7,600 p.a. per capita for Nauru’s 7,000 citizens. As 80 percent of the island has been exported or degraded, the citizens have no choice but to use their trust fund to import Western food and water (Gowdy and McDaniel 1999). Nauru is now economically as sustainable as international stock markets, but environmentally unsustainable. There was no provision for promoting environmental restoration after the mining, only to support consumption.

(d) The fourth substitution of natural capital for human capital is a clear but caricatured case: cut down all tropical rain forests and invest the timber proceeds to endow say 1000 universities in perpetuity. This would be a case of liquidating natural capital (tropical forests) and investing the proceeds in building up social and human capital (education). Ecologists would warn of the irreversible loss of most of the world’s biodiversity. Realists point out that that would be better than what is happening at present, namely that most tropical forests are indeed being liquidated, but the proceeds are invested in guns, limos, and current expenditures. Advocates of social capital might point out that such a massive investment in education might lead world society to conserve what’s left of natural capital.
Often, it was civil society—the grassroots communities and affected people—that raised attention to potential impacts. But now that EA/SA is on its way to becoming institutionalized. EA/SA is normally done by professionals, often in less accessible institutions. Civil society’s former role has thereby been altered; NGOs and oustee organizations have boosted the impact of civil society. Therefore, participation also has become a valuable opportunity to reaffirm linkages with the grassroots. Civil society has another opportunity to improve development through preparation of NEAPs or national environmental priority-setting exercises. But these are not frequent (every few years or so), have not yet reached effectiveness, and are not project specific. Participation in NEAP preparation is important and needs to be emphasized. The results should always be used during the start up of the next project-specific EA, but will never substitute for participation at the project level.

Participation, especially starting from EA scoping and screening, offers a powerful opportunity for the involvement of civil society. Systematic stakeholder analysis is not always done to ensure all groups and interests have opportunities. That argues strongly for starting the participation in the EA scoping phase in the media, especially radio and newspapers. Whole page inserts in newspapers can outline the scoping and the topics on which inputs from civil society are needed. Such inserts can outline current project proposals and provide sufficient information for meaningful discussion. Inserts also can provide sources of further information and details of how comments can be entertained. Such media approaches enhance subsequent public discussions.

World Bank policy is clear: EAs must be prepared ensuring participation of all stakeholders, especially affected peoples, their advocates and civil society in general. That was made mandatory in the 1992 EA policy and reinforced in the official statements in the Environmental Assessment Sourcebook of 1991 (Box 11). Of course, participation, as with many ‘new’ tools, may start as tokenism and be extremely limited for the first few years, but improvements are being achieved. Participation is a very powerful mechanism to foster realistic analysis, effective mitigation and conscientious implementation. Participation is highly cost effective. It is also a means to foster political will. The expectations agreed on must be explicit and keyed into project time markers. This encourages both proponent and task manager to stick to implementation agreements. The details of how participation changed project design must be made explicit and emphasized. Participation also is important as a means to integrate social impact assessment and the strictly environmental/biophysical side.
Box 11

The Evolution of Public Participation:
Warning, through Consultation and Participation to Partnership: The Hydro Case

1. Pre-1950s: WARNING:
   One-way information flow: oustees and other affected were warned that they would be flooded or impacted in a few weeks or months time and had to get out of the way for the greater good of distant citizens

2. 1960s: INFORMATION:
   Primitive participation in resettlement site selection: Oustees were informed that they would be flooded out, and were asked where they would like to move to among a few sites selected by the proponent; compensation often inadequate.

3. 1970s: CONSULTATION:
   Participation in resettlement site selection: oustees were consulted about their impending move, and invited to assist in finding sites to which they would like to move.

4. 1980s: MEANINGFUL CONSULTATION:
   Resettlement participation evolves into consultation: Oustees are meaningfully consulted in advance and can influence dam height or position on the river; oustee’s views on mitigation of resettlement are addressed.

5. 1991: MANDATORY CONSULTATION:
   World Bank’s “EA Sourcebook” mandates meaningful consultation in all EAs; EA is unacceptable without such consultation.

6. 1990s: STAKEHOLDER CONSULTATION:
   Resettlement consultation evolves into stakeholder consultation: Stakeholders views are sought on all impacts, not just involuntary resettlement.

7. 1992: PARTICIPATION:
   World Bank’s EA Policy mandates participation.


9. 1999: PARTNERSHIP:
   Quebec Hydro in full partnership with the First Nation.
Categorization of projects is one of the most controversial aspects of EA work today. EA Category ‘A’ means major impacts such that a full EA process is needed. EA Category ‘B’ projects also create impacts, but smaller in scale, easier to mitigate, less severe, and no irreversibles, so that a less than full-blown EA is required. Those projects thought to create little or no environmental impacts, such as a school textbook production project, are assigned the ‘C’ category for which no EA is required.

The policy is that a whole project is categorized by only the biggest single impact: “Many minor impacts don’t sum to an A.” From the SA sense, current policy is clear. If more than 100–200 people are to be involuntarily displaced, the whole project is to be an EA Category ‘A,’ unless there are strong explicit reasons why not. The proposed policy drops the 100–200 people criterion. For such reasons, there is a case for SA and EA to be categorized separately. Why do a full-blown EA only because of one social impact—the argument runs. Let us adopt an effective SA policy.

But we are always finding exceptions. One would have thought that any 60-meter-high dam would always be a clear A. The recent 60m Wang dam in China is the exception that proves the rule. It is in the deeply scarred Loess region, not across a river. It is mainly a seasonal erosion control or silt-checking device at the bottom of a 300m deep arroyo in a region of thousands of canyons and gullies. Similarly on the social side, EA classification is not always clear. A recent Mekong region water project was classified as a B, although it displaced over 1,000 families, and took land fractions from 34,000 other people. One difference between an A and a B category is the amount of participation required. EA design and implementation are far more important than categorization. Should we let this be the problem, or should we tailor the EA to the project in question without categorization?
Conclusion: Revamp SA and EA Policies

The major shift away from the “do no harm” methods of EIA and SIA have already shifted to the more positive “do good” (as well as do no harm) of SA and EA. The history of social and environmental assessment in the Bank, combined with the need to promote social, human and environmental sustainability strongly suggests we need to revamp our SA and EA policies. The major conceptual flaw in SA/EA is that it assumes that project appraisal is the decision point. Originally, projects were designed by a potential borrower who presented a fully designed project ‘cold’, as it were, to the lender, who then appraised the project to see if a loan should be made. This is no longer the case and some feel it may never have been the norm. Now, projects are co-designed by borrower and lender to a much greater extent. Appraisal is far too late in project gestation to afford saying no. Recognition is overdue that program, policy, sector, PFP, ESAF, CAS, and so forth, are the appropriate places to apply SA/EA, not when a project has already been identified. Strategic EA/SA (Goodland and Tillman 1986; Partidario and Clark 1999) seeks to move SA and EA upstream into the sector, and influence the actual selection of projects to be taken up.

The reasons for the Bank’s halting social and environmental policy development to keep up with a changing and more complex world since the early 1990s, have been mentioned above. Nowadays the climate for policy development is less encouraging. However, the need for a mandatory policy on social assessment is great.

All the other elements for success already are well in place; namely a large team of professional social scientists deployed throughout the Bank, a separate budget, a mandate from the top reinforced periodically by public pronouncements, good manuals and sourcebooks on how to carry out SA, case examples, best practice, training, sample Terms of Reference, and so on. In addition, there is agreement on the broad outlines of what such a policy should contain.

Mandatory policy is required to balance the fierce asymmetry of incentives to lend efficiently (= fastest and at least cost) and to lend prudently, possibly at somewhat greater initial cost. While SA is not expensive, and while it pays for itself many times over in preventing harm and enhancing benefits into the future, it is not totally cost free. Project designers still expect SA and EA to be paid for by soft money from trust funds, rather than from normal project preparation budgets. SA/EA were initially viewed as slowing development by imposing yet another serial step added on to an already lengthy process. When the Pelosi amendment was promulgated by US Congress in 1989, the Bank felt it would be totally impossible to have the EA/SA ready 120 days before the Board votes. The Pelosi amendment is now almost always complied with because EA is started early, and in parallel with other project design elements.

An SA policy should state that development above all seeks to benefit people, communities,
and societies; that adverse impacts are to be prevented, minimized or mitigated; that benefits are to be optimized and must be appropriate for the society; that vulnerable segments of society (ethnic minorities, poor, sick, aged, infants, handicapped) merit special care; that culture is valuable and should not be degraded unnecessarily; and that all design and implementation must be transparent and participatory. It also needs to recognize that it is no longer acceptable that there will be losers in a development project. There is a growing feeling that oustees should be resettled voluntarily because they will be unambiguously better off immediately after their move, because they will immediately receive materialistic compensation in kind and in employment. If compensating potential losers makes the cost benefit ratio uneconomic, the project should not go forward. Of course, if an elite benefited from inequitable or illegal access to resources, and the project rectified that imbalance, such losers might be acceptable.

Both SA and EA policies should be revamped so that they are applied to policies, programs, structural adjustment and sectoral operations to assist into project selection. EA and SA need to be started simultaneously with the other elements of the operation as normal parts of operational development costs (that is, with an integrated budget). Promulgation of such a policy will foster agreement on minimal standards and will strengthen the extended social family's work Bankwide. We need to focus on the trade-off between the four different forms of capital in order to prevent inadvertent consumption of any capital.

Now SA and EA have irreversibly come of age and are forging ahead on separate although still neighboring tracks, the emphasis needs to be on cooperation between the two; let's get the best out of each one in order to promote sustainability—both social and environmental. If a joint SA/EA team is possible, let's join. If not, let's use the findings to enhance each other. Both types of assessment have a long way to go to reach peak effectiveness and full acceptance in the development process. While there has been progress over the last thirty years, it has clearly been incommensurate with need. Current piecemeal progress probably cannot keep up with the increasing need for more social and environmental prudence. A fundamental overhaul probably is necessary to integrate social and environmental precautions as equal partners with the rest of development.
Notes

1. Bank SA is deliberately not modeled on US NEPA SIA. Bank social staff specifically want to adopt a broader SA methodology, rather than the narrower SIA approach. EA began by narrow EIA, and is more recently trying to broaden itself. Narrow ‘impact’ assessment alone, in the sense of ‘do no harm’, cannot lead to sustainability, although it is an essential first step.

2. OMS 2.23 of 1980; this was partly based on FAO’s Technical Manual on involuntary resettlement prepared by David Butcher in the late 1970s, who joined the World Bank some years later. Michael Cernea led the informal drafting team (David Butcher, Scott Guggenheim, Deborah Rubin and Robert Goodland) that led to the policy officially called “Social issues associated with involuntary resettlement in Bank financed projects” (OMS 2.23 of February 1980). This became OPN 10.08 in 1986; OD 4.30 in 1990, and is being revised again, amidst controversy, as of late 1999 as OP 4.12.


5. There were a powerful 71 NGO officers by 1999; 25 in Africa, 20 in ECA, 7 in EAP, 3 in MNA and 9 in LAC.

6. When the OMS for Project Appraisal was ‘converted’, the section for social appraisal was deleted. The conversion of both the resettlement and the indigenous peoples ODs seems more likely to lower standards, than to strengthen them. The 1984 overarching Bank statement of policy on environment and sustainability (OMS 2.36) also was dropped without explanation—or even noting that it had been dropped—in the mid-1990s. The environmental policy on dams and reservoirs (OPN 11.02 of 4/‘89; OD 4.B1-B4) suffered a similar fate some months later. During the preparation of this paper in mid-1999, the central and most invoked social policy—Involuntary Resettlement—was causing consternation during its 6 year ‘conversion.’

7. All World Bank Group manuals, guidelines, policies, best practice, and more are in the public domain at: <http://wbln0011.worldbank.org/institutional/manuals/opmanual.nsf>

9. In July, 1999, the draft joint Energy/Environment Policy Paper “Fuel for Thought” was rejected by the Bank’s Board for the third time in as many years. It excludes the transport sector.

10. Development often has sanctifying adjectives: common ones include economic and social. Political economy focuses on social well-being and quality of human life. Development aims at human society to enhance human livelihood. So whereas economics, development and sociology all focus on improving the human condition directly, ‘environment’ maintains human life-support systems, such as breathable air. Thus, protection of the environment is fundamental to human well-being, but less directly than sometimes less important social concerns.
References


References


